

Pending Claims

The following listing of claims replaces all prior versions and listings of claims in this application:

Listing of Claims

1. (Original) A foam comprising:
 - at least about 50 weight percent thermoplastic polymer; and
 - from about 5 to about 50 weight parts of particles dispersed in the thermoplastic polymer per 100 weight parts of the thermoplastic polymer, wherein:
 - the particles have an average size in the longest dimension of from about 5 to about 300 microns;
 - the foam is closed-cell; and
 - provided that if the particles are electrically conductive, then the foam has a surface resistivity of at least about 1×10^6 ohms.
2. (Withdrawn) The foam of claim 1 wherein the particles comprise at least about 50% inorganic material by weight of the particles.
3. (Withdrawn) The foam of claim 1 wherein the particles comprise at least about 90% inorganic material by weight of the particles.
4. (Withdrawn) The foam of claim 1 wherein the particles comprise at least about 50% organic material by weight of the particles.
5. (Original) The foam of claim 1 wherein the particles comprise one or more clays selected from mica and vermiculite.
6. (Withdrawn) The foam of claim 1 wherein the particles comprise aluminum.
7. (Withdrawn) The foam of claim 1 wherein the particles comprise glass.
8. (Original) The foam of claim 1 comprising at most about 40 weight parts of the particles dispersed in the thermoplastic polymer per 100 weight parts of the thermoplastic polymer.

9. (Withdrawn) The foam of claim 1 comprising at most about 30 weight parts of the particles dispersed in the thermoplastic polymer per 100 weight parts of the thermoplastic polymer.

10. (Withdrawn) The foam of claim 1 comprising at most about 20 weight parts of the particles dispersed in the thermoplastic polymer per 100 weight parts of the thermoplastic polymer.

11. (Withdrawn) The foam of claim 1 comprising at least about 20 weight parts of the particles dispersed in the thermoplastic polymer per 100 weight parts of the thermoplastic polymer.

12. (Original) The foam of claim 1 wherein the particles have an average size in the longest dimension of at least about 10 microns.

13. (Original) The foam of claim 1 wherein the particles have an average size in the longest dimension of at least about 30 microns.

14. (Original) The foam of claim 1 wherein the particles are electrically non-conductive.

15. (Original) The foam of claim 1 wherein the foam has no more than about 10% open cell volume.

16. (Original) The foam of claim 1 comprising a sheet configuration with an average thickness of from about 1 mil to about 4 inches.

17. (Withdrawn) The foam of claim 1 comprising a sheet configuration with an average thickness of from about 1 mil to about 200 mils.

18. (Withdrawn) The foam of claim 1 comprising a sheet configuration with an average thickness of from about 0.2 inches to about 4 inches.

19. (Canceled)

20. (Original) The foam of claim 1 wherein the foam has a density of from about 5 to about 40 pounds/ft³.

21. (Original) The foam of claim 1 wherein the foam has an area density of from about 10 to about 100 g/ft².

22. (Original) The foam of claim 1 wherein the foam has a flexural modulus of at most about 1,000 pounds/square inch.

23. (Withdrawn) The foam of claim 1 wherein the foam has a flexural modulus of from about 1,100 to about 1,800 pounds/square inch.

24. (Withdrawn) The foam of claim 1 wherein the foam has a flexural modulus of at least about 1,900 pounds/square inch.

25. (Original) The foam of claim 1 wherein the foam is unapertured.

26. (Original) The foam of claim 1 wherein the foam comprises at least about 50 weight percent of one or more polyolefins.

27. (Original) The foam of claim 1 wherein the foam comprises at least about 50 weight percent of one or more polyethylene homopolymers.

28. (Original) The foam of claim 1 wherein the thermoplastic polymer comprises one or more polymers selected from polypropylene homopolymers, polypropylene copolymers, polyethylene homopolymers, polyethylene copolymers, ethylene/vinyl acetate copolymer, polystyrene homopolymer, polystyrene copolymer, and high impact polystyrene.

29. (Original) The foam of claim 1 wherein the particles have an average size in the longest dimension of at most about 100 microns.

30. (Original) The foam of claim 1 wherein the density of the foam is from about 0.5 to about 40 pounds/ft³.

31. (Original) The foam of claim 1 wherein the density of the foam is from about 10 to about 30 pounds/ft³.

32. (Withdrawn) A method of enhancing the sound attenuation of an article comprising attaching the foam of claim 1 to the article.

33. (Withdrawn) A method of enhancing the sound attenuation of an article comprising incorporating the foam of claim 1 into the article.